



Climate Impacts and Adaptation; Towards Local Solutions to Global Challenges

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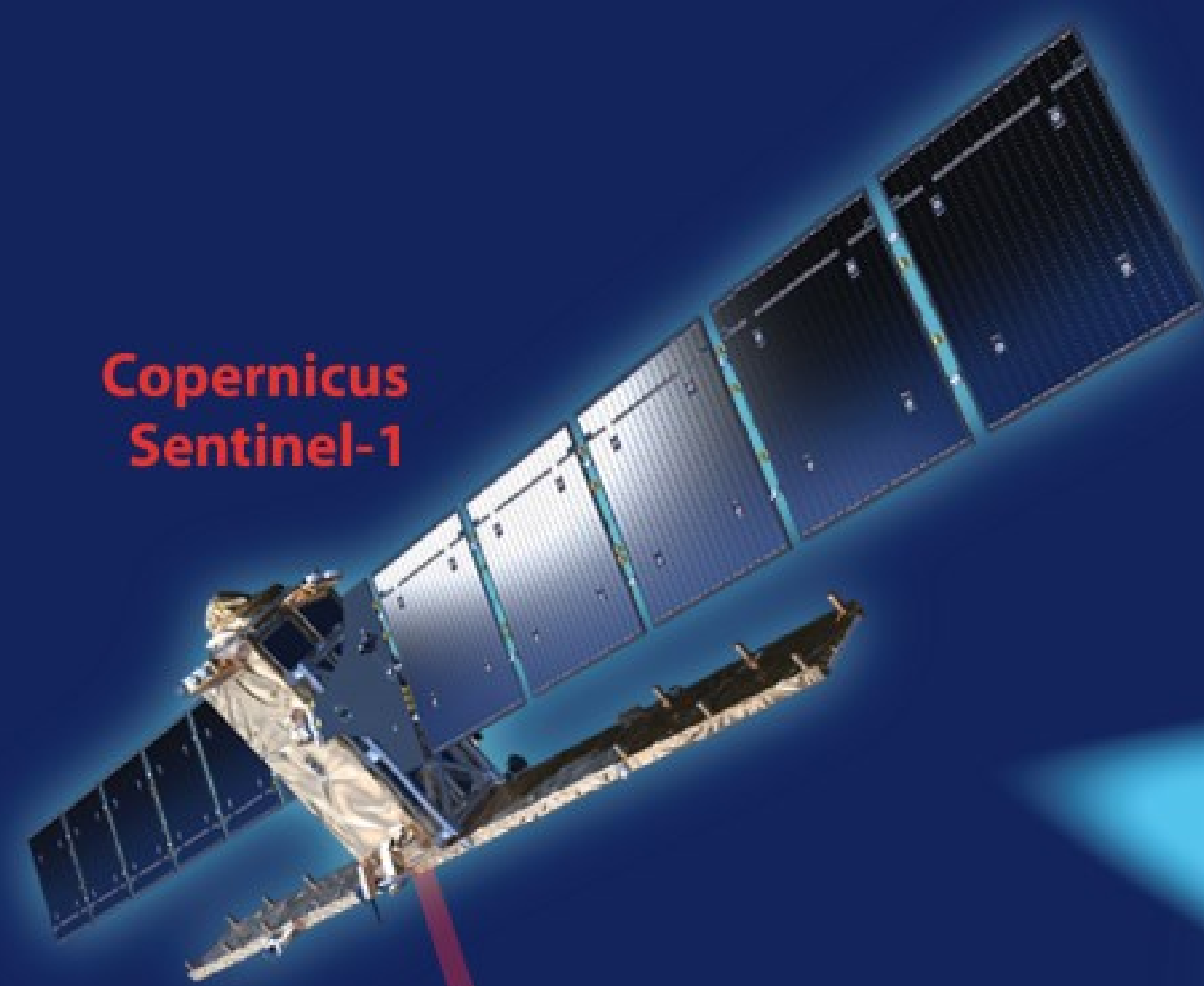
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Meeting Challenges



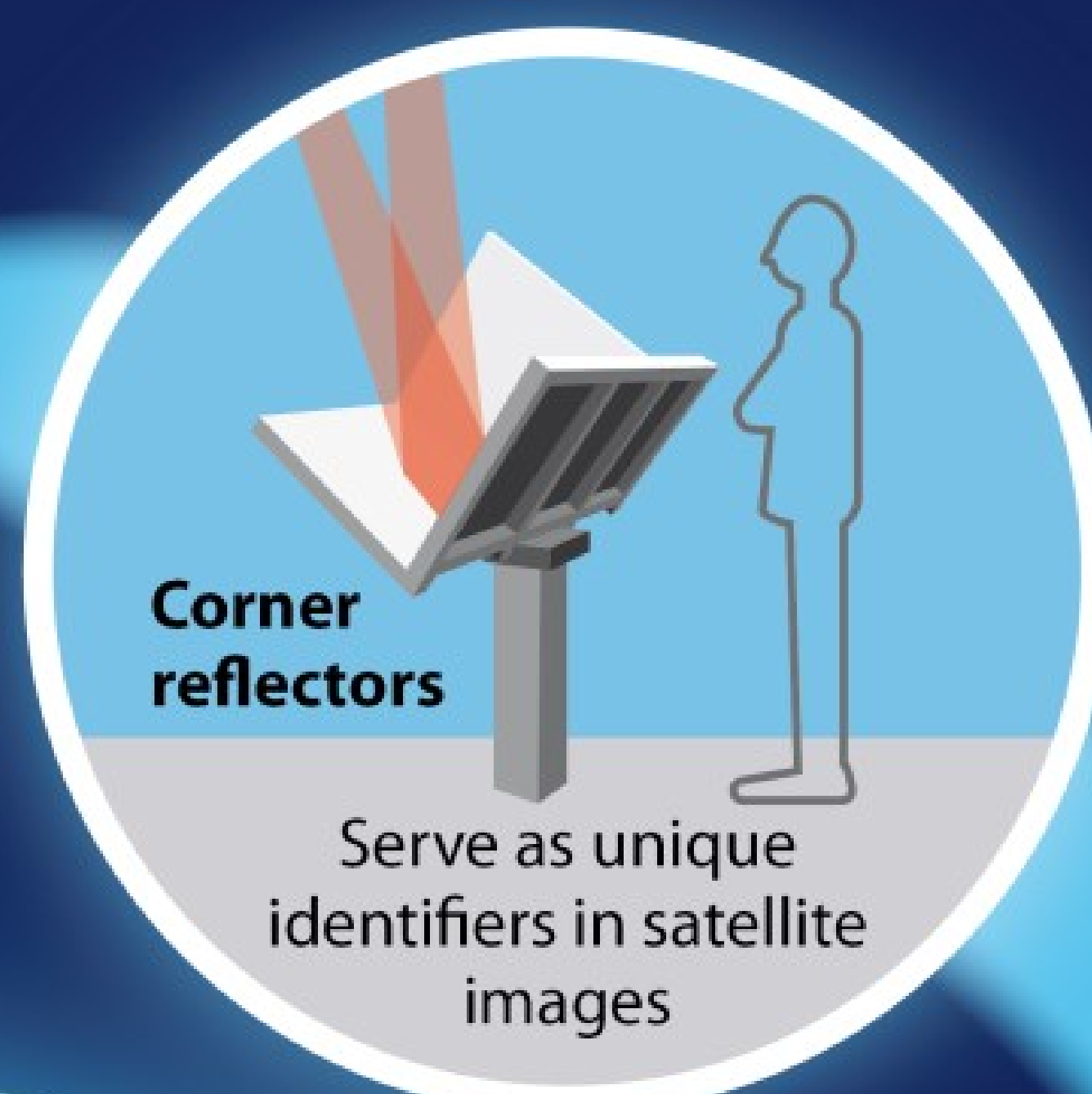
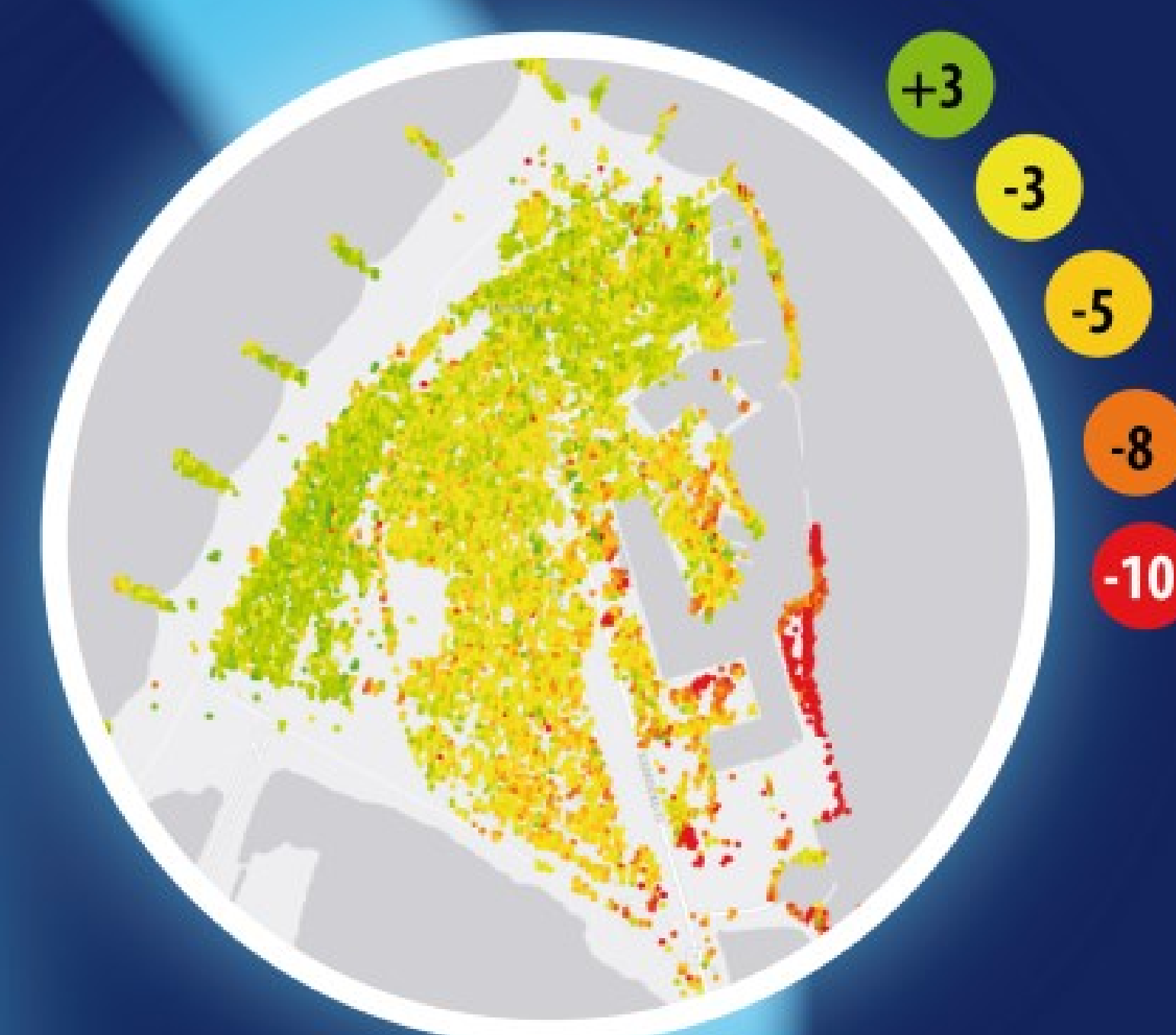
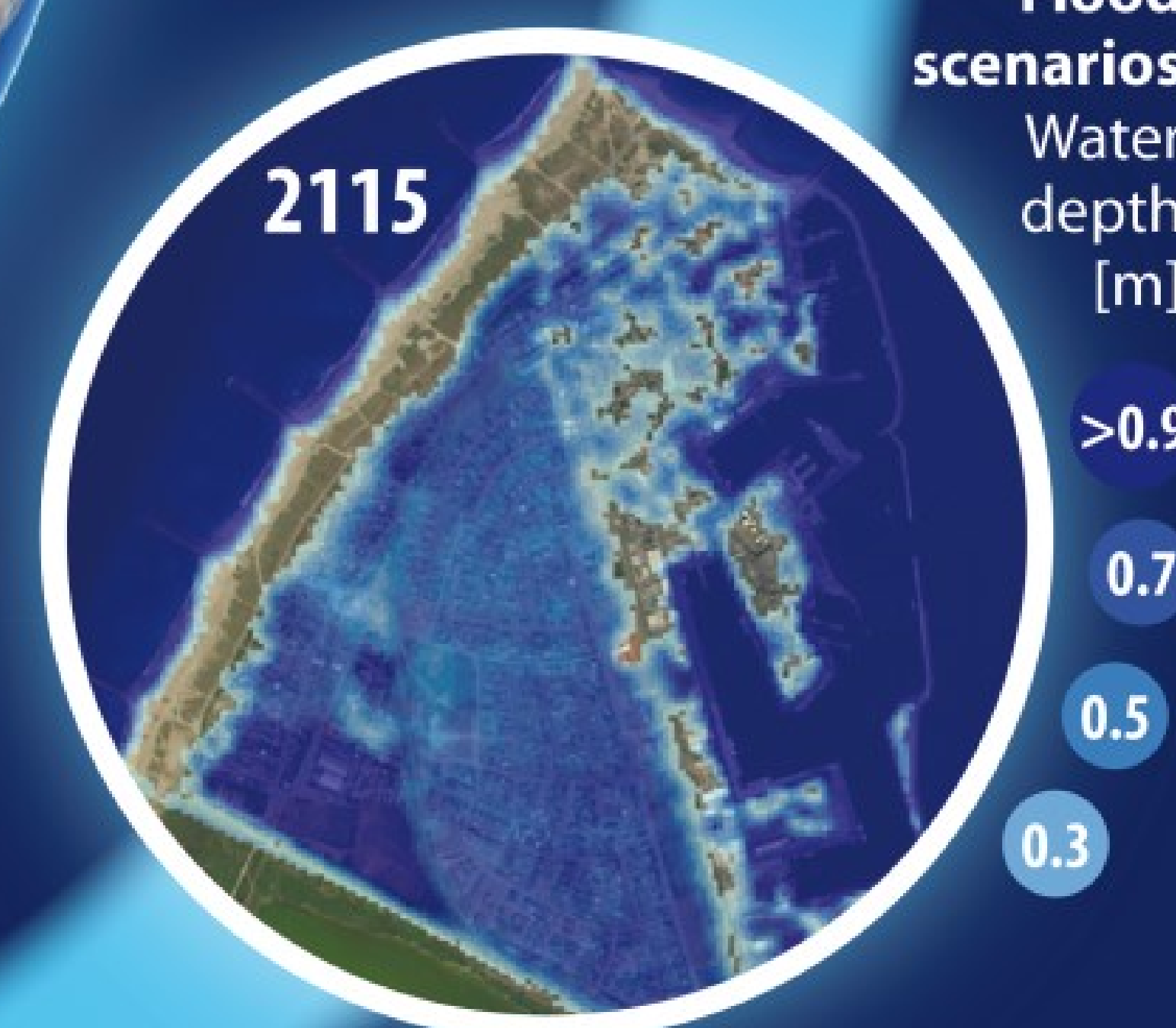
Climate change and sea level rise threaten coastal communities worldwide. In Thyborøn, Denmark, combined impacts of climate change on future flood risks are scrutinized in order to better understand specific hazards and challenges, and how to meet them. Climate research and projections, data, and hydrodynamic modelling results are integrated with historic evidence, geological information, conditions of sewer system and other infrastructure in a common API. In transdisciplinary collaboration, the actors share ideas and visions in order to optimize mitigation and adaptation measures, and to innovate and create new knowledge.

Copernicus Sentinel-1

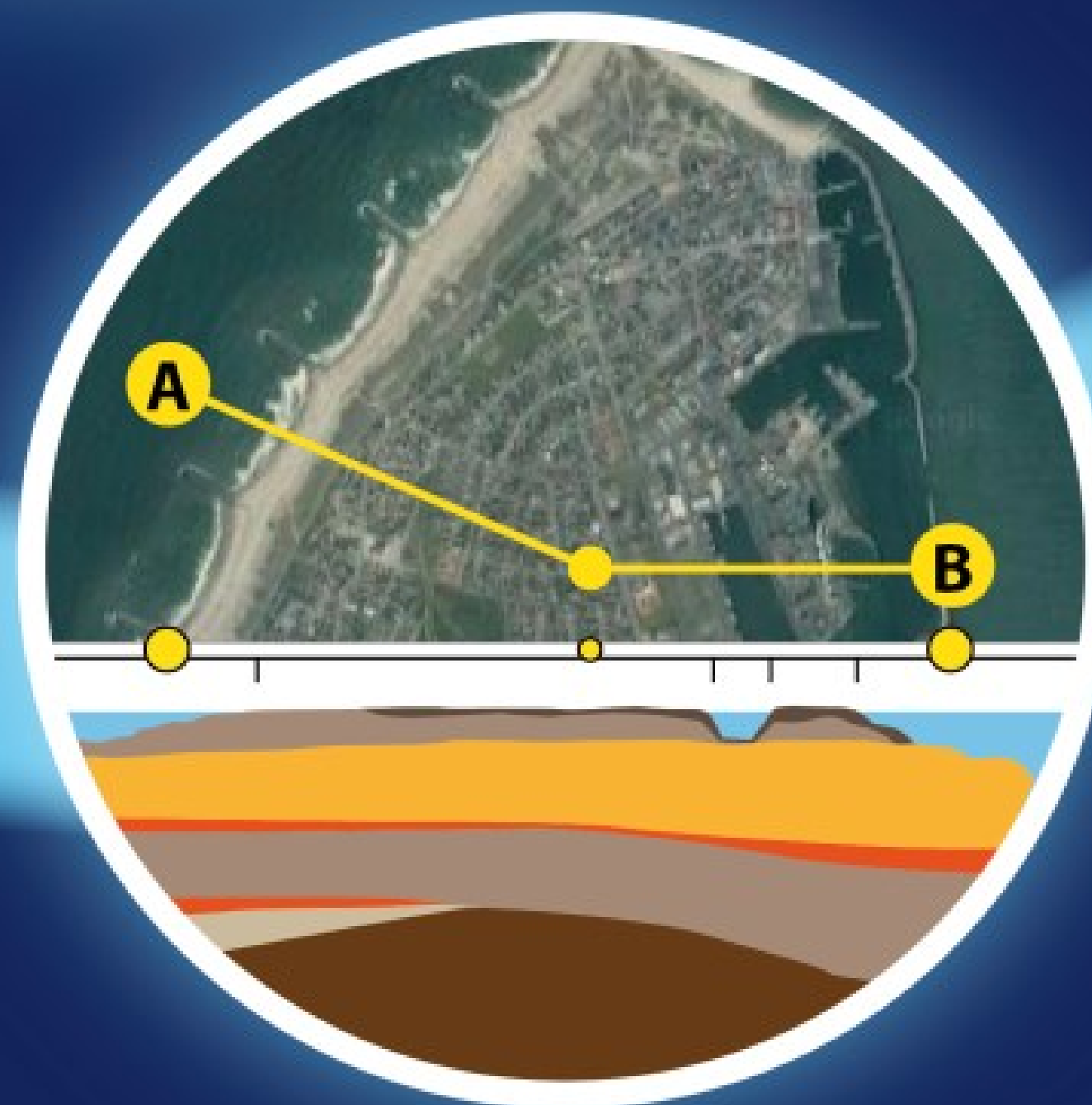


Compounding Dynamics

Land subsidence exacerbates climate change impacts and flood risk. A corner reflector network links subsidence rates calculated from Copernicus Sentinel-1 satellite data to the height datum network and to sea level.

Land subsidence
Thyborøn [mm/year]Flood scenarios
Water depth [m]

Geology, data and model results in an API



Further research

Early warning

Solutions

Research

Actors

A shared pool of knowledge, a mutual understanding of needs, collaboration on adaptation and innovation.

Business

Governance

Citizens

Engineering

Coastal Erosion and Rising Sea Levels

Thyborøn

Coastline
1791Coastline
2017

DK-7680 Storm Surge Timeline

